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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,764	08/15/2001	Eugene Lee	3981-16	2391
20575	7590	07/26/2005		
MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			EXAMINER HARPER, KEVIN C	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,764

Applicant(s)

LEE ET AL

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,9,12-14,16,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 3,5-8,10,11,15,17 and 20-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Drawings

1. Figure 1 is objected to because item 12 should be labeled with “network processing device” (37 CFR 1.83(a)). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4, 9, 12-14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Hegde et al. (US 6,810,031).

2. Regarding claim 1, Hedge discloses a data rate controller (fig. 2, item 108; fig. 3, item 108; col. 6, lines 51-57) for controlling a rate that data is transferred over a backplane (fig. 1, item 110 in a network processing device (fig. 1). The data rate controller comprises a bandwidth allocator to allocate bandwidth to an input port (col. 7, lines 1-3, 43-47 and 66-67), a bandwidth limiter to identify a maximum allowable bandwidth for an input port (col. 7, lines 48-55), and a bandwidth tracker to identify an allocated bandwidth and to prevent the input port from connecting to the output port when the bandwidth is used up (col. 7, line 66 through col. 8, line 5).

3. Regarding claim 2, the bandwidth allocator comprises a register (col. 7, line 48-49; note: counter) that stores a programmable peak time slot rate value (col. 7, lines 66 through col. 8, line 5; col. 6, lines 33-35 and 54-58).

4. Regarding claim 4, the counter increments when data is not sent and decrements when data is sent (col. 7, lines 50-55 and 62-65; col. 8, lines 3-5).

5. Regarding claim 9, the data rate controller includes an arbitration circuit (fig. 2, item 108; fig. 3, item 108) to arbitrate between input ports based on priority and weight of the packets (col. 6, lines 47-53; col. 12, lines 54-60; fig. 7; note: weight is assigned bandwidth; col. 13, lines 11-16) during a next time slot (col. 6, lines 33-35).

6. Regarding claims 12-14, Hedge discloses a method for controlling a rate that data is transferred over a backplane (col. 6, lines 51-57; fig. 1, item 110) in a network processing device (fig. 1). The method comprises allocating bandwidth to an input port (col. 7, lines 1-3, 43-47 and 66-67), sending requests from the input port during a next time slot (fig. 9, step 2), increasing bandwidth allocation for ports that are not connected for the next time slot and decreasing

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bandwidth allocated for ports that are connected for the next time slot (col. 7, lines 50-55 and 62-65; col. 8, lines 3-5), and preventing input ports from sending requests when the allocated bandwidth has been exhausted (col. 8, lines 15-19; col. 9, lines 19-26; col. 12, lines 30-32).

7. Regarding claim 16, bandwidth is identified for an output port for transferring data to a network (fig. 11, "Available BW>0?" and "Total REQ > Avail BW") and preventing the output ports that have used up the bandwidth from granting connections to the input ports (fig. 11, "Grant [n]=0").

Claims 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Grow (US 2004/0081185).

8. Regarding claims 18-19, Grow discloses a network processing device (fig. 1) comprising multiple input ports (items 2) for receiving incoming packets (para. 16), multiple output ports (items 4) for outputting packets, a switch fabric (item 6), multiple virtual output queues (fig. 3, item 12) associated with the input ports, and a set of data rate controllers and scheduler (fig. 3, item 16; note: one selector for each input RAM - fig. 2, items 2) virtual output queue for controlling a data rate that the input ports can transfer data to the output ports over the switch fabric (para. 48, lines 6-12; note: weighted priority scheduling).

Allowable Subject Matter

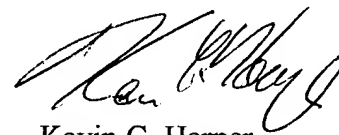
9. Claims 3, 5-8, 10-11, 15, 17 and 20-22 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

July 25, 2005